AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended):   A sintered body electrode for capacitors, comprising at least one member selected from an earth-acid metal, an alloy mainly comprising an earth-acid metal, an electrically conducting oxide of an earth-acid metal, and a mixture of two or more thereof, wherein the value obtained by dividing the difference between the volume of a sintered body measured under atmospheric pressure and the volume measured in a vacuum, which are determined according to the Archimedes method, which is a method for determining the density of a sample using Archimedes' principle that the buoyancy which a solid in liquid receives is equal to the mass of liquid having the same volume of the solid, by the volume measured under atmospheric pressure is 11% or less.

2. (original): The sintered body electrode for capacitors as claimed in claim 1, wherein the earth-acid metal is tantalum.

3. (original): The sintered body electrode for capacitors as claimed in claim 1, wherein the earth-acid metal is niobium.

4. (original): The sintered body electrode for capacitors as claimed in claim 1, wherein the electrically conducting oxide of an earth-acid metal is niobium oxide.

5. (previously presented): The sintered body electrode as claimed in claim 1, wherein the specific surface area is from 1 to 16 m^2/g.

6. (previously presented): The sintered body electrode as claimed in claim 1, wherein the product (CV value) of the electrochemical forming voltage and the electrostatic capacitance is from 50,000 to 340,000 $\mu F \cdot V$/g.

7. (previously presented): The sintered body electrode as claimed in claim 1, wherein the volume is from 4 to 550 mm^3.

8. (currently amended): A method for producing a sintered body electrode, comprising a step of shaping and sintering at least one member selected from an earth-acid metal, an alloy mainly comprising an earth-acid metal, an electrically conducting oxide of an earth-acid metal, and a mixture of two or more thereof, and a step of etching the resulting sintered body, wherein the value obtained by dividing the difference between the volume of a sintered body measured under atmospheric pressure and the volume measured in a vacuum, which are determined according to the Archimedes method, which is a method for determining the density of a sample using Archimedes' principle that the buoyancy which a solid in liquid receives is equal to the mass of liquid having the same volume of the solid, by the volume measured under atmospheric pressure is 11% or less.

9. (currently amended): A method for producing a sintered body electrode, comprising a step of partially nitriding a powder comprising at least one member selected from an earth-acid metal, an alloy mainly comprising an earth-acid metal, an electrically conducting oxide of an earth-acid metal, and a mixture of two or more thereof, a step of adding a resin binder thereto and shaping and sintering the powder, and a step of etching the resulting sintered body, wherein the value obtained by dividing the difference between the volume of a sintered body measured under atmospheric pressure and the volume measured in a vacuum, which are determined according to the Archimedes method, which is a method for determining the density of a sample using Archimedes' principle that the buoyancy which a solid in liquid receives is equal to the mass of liquid having the same volume of the solid, by the volume measured under atmospheric pressure is 11% or less.

10. (previously presented): A solid electrolytic capacitor element comprising the sintered body electrode described in claim 1 above as one electrode, a dielectric material formed on the surface of the sintered body, and another electrode provided on the dielectric material.

11. (original): The solid electrolytic capacitor element as claimed in claim 10, wherein the other electrode is at least one member selected from an organic semiconductor and an inorganic semiconductor.

12. (original): The solid electrolytic capacitor element as claimed in claim 11, wherein the organic semiconductor is at least one member selected from an organic semiconductor comprising benzopyrroline tetramer and chloranil, an organic semiconductor mainly comprising

tetrathiotetracene, an organic semiconductor mainly comprising tetracyanoquinodimethane, and

an organic semiconductor mainly comprising an electrically conducting polymer obtained by

doping a dopant to a polymer containing a repeating unit represented by the following formula

(1) or (2):
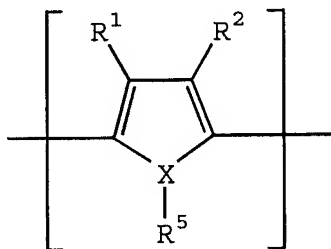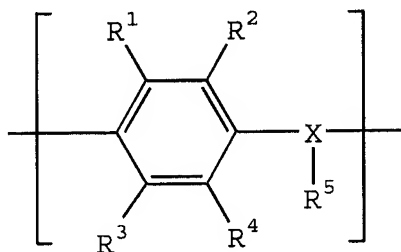
(1)   (2)

wherein R^1 to R^4, which may be the same or different, each represents a hydrogen atom,

an alkyl group having from 1 to 6 carbon atoms or an alkoxy group having from 1 to 6 carbon

atoms, X represents an oxygen atom, a sulfur atom or a nitrogen atom, R^5 is present only when X

is a nitrogen atom, and represents a hydrogen atom or an alkyl group having from 1 to 6 carbon

atoms, and each of the pairs R^1 and R^2, and R^3 and R^4 may combine with each other to form a

ring structure.

13. (original): The solid electrolytic capacitor element as claimed in claim 12, wherein

the electrically conducting polymer containing a repeating unit represented by formula (1) is an

electrically conducting polymer containing a structure unit represented by the following formula

(3) as a repeating unit:

(3)
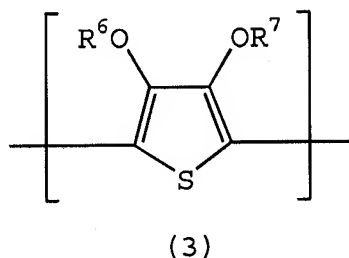
wherein each of R^6 and R^7 independently represents a hydrogen atom, a linear or branched, saturated or unsaturated alkyl group having from 1 to 6 carbon atoms, or a substituent for forming at least one 5-, 6- or 7-membered saturated hydrocarbon ring structure containing two oxygen atoms when the alkyl groups are combined with each other at an arbitrary position, and the ring structure includes a structure having a vinylene bond which may be substituted, and a phenylene structure which may be substituted.

14. (original): The solid electrolytic capacitor element as claimed in claim 13, wherein the electrically conducting polymer is selected from polyaniline, polyoxyphenylene, polyphenylene sulfide, polythiophene, polyfuran, polypyrrole, polymethylpyrrole and substitution derivatives thereof.

15. (original): The solid electrolytic capacitor element as claimed in claim 13, wherein the electrically conducting polymer is poly(3,4-ethylenedioxythiophene).

16. (original): The solid electrolytic capacitor element as claimed in claim 11, wherein the inorganic semiconductor is at least one compound selected from molybdenum dioxide, tungsten dioxide, lead dioxide and manganese dioxide.

17. (original): The solid electrolytic capacitor element as claimed in claim 11, wherein the semiconductor has an electrical conductivity of 10^{-2} to 10^3 S/cm.

18. (previously presented): A method for producing a solid electrolytic capacitor element, comprising a step of electrochemically forming the sintered body electrode claimed in claim 1 to form a dielectric layer on the surface thereof, and a step of forming the other electrode on the dielectric layer.

19. (previously presented): A solid electrolytic capacitor using one or more solid electrolytic capacitor element(s) claimed in claim 10.

20. (original): An electronic circuit using the solid electrolytic capacitor claimed in claim 19.

21. (original): An electronic device using the solid electrolytic capacitor claimed in claim 19.